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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/894,803	06/29/2001	Simo Maenpaa	TU1.P29	3378

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EXAMINER	
CROW, STEPHEN R	

ART UNIT	PAPER NUMBER
3764	

DATE MAILED: 04/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/894,803	MAENPAA, SIMO	
	Examiner	Art Unit	
	Steve R. Crow	3764	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 November 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *3-8,10 and 12-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *3-8,10,12-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 3-8,10,12-16 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. It is unclear how the receiver (such as a Polar heart rate monitor) can determine the intensity of the signal. The applicant has presented a hypothetical use of such a receiver . What structure has been added to the receiver to permit it to recognize different signal strengths? The evidence submitted by applicant (Declaration of Simo Maenpaa) has been considered and does discuss electromagnetic field intensity theory, but the examiner contends that one skilled in the art, given applicant's disclosure, would not be able to produce the invention as claimed.

It is unclear as to how the modification circuitry 33 and microprocessor 34 are able to modify a heart rate monitor such as a Polar monitor to measure variations in the field strengths.

1. Claims 10,12-16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The Specification refers to field of signal processing wherein signals are amplified, filtered and converted. These are all concepts in the fields of electronic devices and circuits; however, applicant does not provide structural recitations of amplifiers, filters, and signal modifiers in the Specification.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 3-8,10,12-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Huish et al or Trulaske.

Huish et al or Trulaske et al each show all of applicant's claimed structure, wherein a user has a Polar type heart rate monitor which transmits data to a microprocessor on the treadmill having control means which adjusts the speed and inclination of the treadmill in response to the signal. When the user is beyond the range of the receiver, no signal is received; therefore, the receiver is sensitive to the position of the user, hence, the receiver is responsive to the position of the user on the endless belt.
The claims do not recite a varation of field strengths within the detection field of the receiving means.

As to claim 10, the examiner takes Judicial Notice that microprocessors generally include amplifiers, filters, and signal modifiers; and therefore, that Huish and Trulaske would inherently possess such microprocessor elements.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter

pertains. Patentability shall not be negatived by the manner in which the invention was made.

I. Claims 3-8,10,12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huish et al or Trulaske et al. in view of Shyu.

Huish et al or Trulaske et al utilize an electromagnetic sensor which broadly senses the position of the user on a treadmill as stated in the previous paragraph. Shyu teaches the use of electronic sensors for determining the position of the user on a treadmill. Given these teachings, it would have been obvious to one skilled in the art to utilize electromagnetic sensors to sense the discrete positions of the user on a treadmill in the manner performed and taught by the Shyu controller for user safety purposes.

As to claim 10, the examiner takes Judicial Notice that microprocessors generally include amplifiers, filters, and signal modifiers; and therefore, that if not inherent in Huish, Shyu and Trulaske , it would have been obvious to utilize such microprocessor elements.

5. Claims 3-8,10,12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Potash et al in view of Huish et al or Trulaske.

Potash et al discloses an adaptive treadmill having an ultrasonic range finder located on the treadmill and for sensing the location of the user on the treadmill to respond in an appropriate manner to change the speed and/or slope.

Huish et al and Trulaske each teach the use of a transmitter which transmits a signal to a receiver located on the treadmill which then uses a controller to control and operate the treadmill belt speed and inclinations. Given these teachings, it would have been obvious to one skilled in the art to modify the Potash et al treadmill by substituting an electromagnetic signal generating/receing means for the ultrasonic range finder as an equivalent means for sending and receiving user position data for user safety purposes.

As to claim 10, the examiner takes Judicial Notice that microprocessors generally include amplifiers, filters, and signal modifiers; and therefore, that if not inherent in Potash, Huish and Trulaske , it would have been obvious to utilize such microprocessor elements.

Response to Arguments

6. Applicant's arguments filed 11-29-04 have been fully considered but they are not persuasive.

7. Applicant continues to present broad claims and argue limitations which are not present in the claims. The examiner again contends that the Huish et al and Trulaske devices still meet the invention as claimed. They employ Polar type heart rate monitors which transmit an electromagnetic signal to the treadmill. These systems primitively control the treadmill

depending upon where the user is located. When the user is too far away from the receiver (but still on the treadmill) , a signal is not received and when the user is within the receivable range of the receiver, the signal is picked up; therefore , there are two field strengths detected:1-within range, and 2- out of range. The treadmill is then broadly controlled by the user location thereon.

The prior art devices generate an electrical signal having a singular field strength, and have receiving means for detecting that singular field strength. The claims do not recite a variable field strength within the operating receiving range of the receivers.

Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

2.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steve R. Crow whose telephone number is 571-272-4973. The examiner can normally be reached on Reg:8:30-6;Off First Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine Yu can be reached on 571-272-4835. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

STEPHEN R. CROW
PRIMARY EXAMINER
ART UNIT 332

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